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(71) Applicant : **ERICSSON - GE MOBILE
COMMUNICATIONS INC.
15 East Midland Avenue
Paramus, New Jersey 07652 (US)**

(72) Inventor : **Raith, Alex Krister
901 A7 Park Ridge Road
Durham, N.C. 27713 (US)**

(74) Representative : **Lövgren, Tage et al
Telefonaktiebolaget L M Ericsson
Patent and Trademark Department
S-126 25 Stockholm (SE)**

(54) Cellular verification and validation system.

(57) A system for the validation and verification of base stations and mobile stations within a cellular radio communications network. The system includes a fixed key and a changeable key which are applied as inputs to an authentication algorithm. The algorithm generates key-dependent responses, at least one of which is independent of the changeable key. The responses generated by a particular mobile station are compared to the responses generated by the network and the presence of fraudulent users may be detected.

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EUROPEAN SEARCH REPORT

Application Number
EP 92 85 0061

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.5)
A	PROCEEDINGS 1987 INTERNATIONAL CONFERENCE ON DIGITAL LAND MOBILE RADIO COMMUNICATIONS 30 June - 3 July 1987, Venice (IT) H.R.RAST ET AL. "SECURITY MECHANISMS IN THE FUTURE EUROPEAN DIGITAL CELLULAR SYSTEM" * page 126, paragraph 2.2 * * page 129, paragraph 3.2 - page 130, paragraph 3.2 * * figure 2 *	1,8,15, 20,25, 33,41,51	H04Q7/04 H04L9/32
A	US-A-4 955 049 (GHISLER) * column 1, line 32 - line 52 *	1,8,15, 20,25, 33,41,51	
A	WO-A-84 00456 (WESTERN ELECTRIC COMPANY) * abstract * * page 2, line 11 - page 3, line 34 *	1,8,15, 20,25, 33,41,51	
A	DE-A-34 20 874 (LICENTIA) * abstract * * page 6, line 4 - page 8, line 12 * * figures 1,2 *	1,8,15, 20,25, 33,41,51	H04L H04Q
The present search report has been drawn up for all claims			
Place of search	Date of completion of the search	Examiner	
THE HAGUE	22 September 1994	Lydon, M	
CATEGORY OF CITED DOCUMENTS		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	
X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document			